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THE U.S. AUTOMOTIVE PARTS MARKET AND JAPANESE COMPETITION

Summary

The selection of automotive parts as the subject of the second round of MOSS (market-oriented, sector-selective) negotiations has focused fresh attention on the trade impact of the close ties between Japanese motor vehicle manufacturers and their local suppliers. A strong case can be made that these relationships make it difficult for American companies to sell production parts to Japanese vehicle plants in the United States or replacement parts to the U.S. dealer networks of Japanese automotive makers. The same applies to the roadblocks domestic producers encounter in trying to crack the huge original equipment market in Japan. But there are signs that American suppliers of both original equipment and replacement products are starting to win more Japanese business in the United States, thanks in large part to the run-up in the yen's value but also because an expanding number of U.S. firms can match their Japanese competitors in terms of quality, price and other requirements.

Competitive Challenges for U.S. Suppliers

Unprecedented change, critical time -- phrases like those became the stock descriptions of the competitive pressures on the U.S. motor vehicle parts and accessories industry in the first half of the 1980s (see JEI Report No. 48A, December 21, 1984). Yet as rough as that period was for the 2,000 or so domestic companies that make production components and replacement parts, corporate executives and industry analysts say that it was just a preview of worse to come. The reasons are not hard to identify -- declining production by

Detroit, the Big Three's tougher supplier requirements and expanding purchases of foreign-made production parts, limited opportunities for export growth, the difficulties of selling service parts to Japanese automotive makers' U.S. dealer networks, the procurement practices of Japanese-affiliated vehicle assembly plants in this country and the influx of Japanese parts suppliers into the market. Forging a consensus on the ranking of these factors is another matter.

Lower output is the obvious candidate for top billing. Over the medium term production of cars and trucks in this country and Canada by U.S.-headquartered automotive manufacturers is unlikely to match 1986's total of 12.4 million vehicles -- itself 0.6 million units short of the year-earlier tally. The reason is simple: imports will continue to take sales away from domestic makes, particularly in the market's low end, whether American car and truck demand remains strong or weakens. Original equipment parts suppliers acknowledge that production anywhere near the 12-million-unit mark will translate into far more business than they had during the 1980-82 slump when North American motor vehicle output averaged just 8.9 million units a year. But their benchmark is the contract volume generated by 1978's all-time-high production run of 14.6 million units. By that standard there will not be enough business to support the already thinned ranks of independent OE suppliers.

Detroit's reduced parts requirements are just the most visible problem for these vendors. General Motors Corp., Ford Motor Co. and Chrysler Corp. have redrafted their criteria for contract awards, forcing suppliers to assume greater responsibility for quality improvement and cost containment while at the same time looking to them for more input in the new product design and development process. Industry executives admit that many outside suppliers will not be able to meet these stiff standards. But those that can stand a good chance of winning the multi-year single-source contracts that are increasingly replacing the Big Three's traditional year-to-year agreements with several companies to build the same part.

Competitive independents will benefit as well from the Big Three's slow but steady switch to outside suppliers, which currently provide perhaps 30 percent of GM's parts, approximately half of Ford's and an estimated two-thirds of Chrysler's. But as the U.S. industry learned years ago, not all of this business will stay in the United States. Contracts for labor-intensive parts will still go to suppliers in low-wage countries like Brazil, Mexico, Korea and Taiwan. At the same time Detroit will continue to source some powertrain products and other major mechanical components from firms in Japan, whether affiliates or unrelated companies, although the strong yen is expected to cap purchases at 1986's \$1 billion-plus level.

In a double blow to domestic OE parts producers, the increase in car and truck production expected outside the United States and Canada during the late 1980s and early 1990s will not provide much additional business even though on paper the dollar's lower value should boost export volume. In Latin America and Southeast Asia, where most of the output gains will occur, governments continue to maintain import restrictions and other protective measures such as

local content and export performance requirements to strengthen the manufacturing capability of local industry.

Neither is Europe likely to be a growth market for exporters of production parts since many American-designed components are already made there, either through licensing arrangements or by U.S. automotive manufacturers with European assembly operations. Ironically, Japan, which has always been written off as a closed market for domestic parts makers because of the structural relationships between Japanese original equipment producers and their suppliers, is perhaps the most promising source of new export business over the long haul. In the medium term, however, sales gains will remain modest; negotiating OE contracts, particularly for functional parts, is simply too time-consuming to show up quickly on order books.

With analysts projecting hard times ahead for the OE end of the business, growth in the \$100 billion U.S. parts industry will hinge on its performance in the expanding domestic aftermarket. Here, at least, American producers have grounds for optimism, whether they are among the 50 percent of the industry making only replacement parts or the half that turns out both OE and service products. Even factoring in more import competition, domestic manufacturers will still control most sales of replacement parts for U.S.-built cars and trucks -- sales that make up roughly 85 percent of the aftermarket. They are also expected to remain the major suppliers of replacement parts for Japanese vehicles distributed through automotive repair shops, mass merchandisers and other nondealer channels.

These favorable market signs are all but ignored by domestic parts manufacturers. Instead, corporate executives return time and again to what they consider one of the major competitive challenges for the industry: the continued inability of American makers to break the near stranglehold of Japanese companies on the parts operations of franchised Japanese car and truck dealers in the United States. The fact that the dealer network handles well under 50 percent of the service and repair parts for Japanese vehicles is dismissed as irrelevant. What counts, say industry representatives, is that competitive American producers are denied access to the primary U.S. distribution channel for mechanical components and other high value-added products because they are locked out of the OE parts business in Japan. Elaborating, domestic makers point out that Japanese vehicle manufacturers, which generally have the final say in the parts sourcing decisions of their American dealers, tap the same companies that turn out production parts to supply genuine replacement parts to the aftermarket -- and these companies are almost always Japanese.

The U.S. industry has long blamed the inflow of replacement products from Japan for the huge bilateral trade deficit in motor vehicle parts and accessories, which totaled an estimated \$4.2 billion in 1986 (see Table 1-3). In recent years, though, domestic suppliers have sounded the alarm over another challenge to their position -- the exclusionary OE procurement policies of Japanese car and truck assembly plants in this country. Actually, note industry leaders, this issue is the mirror image of the problem of selling production parts to Japanese automotive makers for use in their Japan-built vehicles: both have their origins in the close ties between Japanese original equipment manufacturers and their traditional Japanese parts suppliers.

Japan's U.S. Assembly Plants: Boon or Bane?

It is not hard to understand why domestic suppliers have taken aim at what they characterize as the exclusionary purchasing practices of the U.S. automotive assembly operations of Japanese corporations. In 1986 the three subsidiaries in production -- Honda of America Manufacturing, Inc., Nissan Motor Manufacturing Corp. U.S.A. and New United Motor Manufacturing Inc., a joint venture between Toyota Motor Corp. and General Motors -- turned out nearly 500,000 cars and just over 100,000 pickup trucks. In 1990, when the plants currently being built by Mazda Motor Manufacturing (USA) Corp., Diamond-Star Motors Corp. (the Mitsubishi Motors Corp.-Chrysler partnership), Toyota Motor Manufacturing, U.S.A. Inc. and Subaru-Isuzu Automotive Inc. (a tie-up between Fuji Heavy Industries, Ltd. and Isuzu Motors Ltd.) are onstream, Japanese motor vehicle manufacturers will have the capacity to produce 1,650,000 cars and trucks a year in the United States (see Table 4). Add in Honda Motor Co., Ltd.'s Canadian plant and the factories Toyota and a Suzuki Motor Co., Ltd.-GM joint venture are putting up in Canada and the figure hits 1,980,000 vehicles -- a major addition to North American production capacity under any circumstances but especially when many U.S.-headquartered vehicle makers are retrenching.

For American OE parts producers forced to cope with Detroit's production cutback, the expansion could not come at a better time. But there is a big catch, say domestic companies. Based on the track record of the three U.S. plants already in operation, Japanese automotive makers producing in North America will not source as high a percentage of their production parts requirements from local suppliers as they could, opting instead to bring in components from Japan or give their business to the Japanese parts manufacturers that follow them to the United States and Canada.

Measuring domestic content is an inexact science even using the Environmental Protection Agency's CAFE regulations or the language of various domestic content legislative proposals as a guideline, but the companies with plants under construction estimate that their vehicles at startup will have the same 50 to 60 percent local content that the cars and trucks assembled by Honda, Nissan and NUMMI now have. The U.S. parts industry scoffs at this figure, pointing out that its biggest component is labor. At most, it is calculated, the domestic parts content of vehicles built in this country is 20 percent. And that number, spokesmen add, is almost entirely made up of products like glass, paint, tires, seats, carpeting and plastic components -- in short, non-functional parts.

The major components brought in from Japan are powertrain products -- engines, transmissions and differentials or transaxles, which represent perhaps 30 percent of a vehicle's cost. These products have never been candidates for local sourcing simply because the design work is proprietary. Moreover, even in Japan, contracts for key powertrain componentry are not awarded to companies outside an automotive manufacturer's traditional group of suppliers. Executives of six of the seven Japanese assembly plants in operation or under construction in this country have also ruled out in-house production of engines and related products, saying that current or planned output levels (200,000 to 250,000 units a year) do not make this move cost effective.

The exception, to no one's surprise, is Honda, the pioneer in U.S. car production. In early January 1987 the company announced that it would invest

\$450 million in its existing Ohio engine assembly plant to manufacture engine, drivetrain, suspension and brake assemblies for the 360,000 cars it expects to build here in coming years. When the factory reaches full operation in 1990, all the high value-added components for the Accord and Civic will be made in the United States. This will boost the domestic content of Honda vehicles to a projected 80 percent, or within striking range of the 90 percent-plus local content of the U.S. Big Three's current North American output, although Honda officials, adopting a conservative calculation method, are using the figure of 66 percent. It will also go a long way toward answering the labor movement's complaint that Japanese vehicle assembly plants in this country create only three parts-related jobs compared with 11 for American-owned facilities.

Honda's announcement is just the most visible sign that Japanese motor vehicle manufacturers are rethinking the purchasing policies of their U.S. subsidiaries. The same thing can be seen in the higher number of North American companies supplying the transplants, as they are called. Honda now has more than 60 major suppliers of production parts and materials compared with roughly 40 two years ago, while Nissan's OE supplier list has increased from 88 firms to 105 over the same period. For its part, NUMMI is buying production components and materials from 110 producers in the United States and Canada -- 40 or so more than at startup. Moreover, each of these companies as well as the firms with plants under construction emphasize that they are actively searching for additional OE vendors.

These statements are not ploys to silence the drumbeat of U.S. criticism about the low domestic parts content of their vehicles. More fundamental factors are at work. The obvious one is the strong yen, which has not only wiped out the cost advantage of components sourced from Japan but in many cases given American suppliers a substantial edge. At the same time, an increasing number of U.S. parts producers can meet the transplants' two other primary criteria for domestic sourcing -- quality at least equal to that of the Japanese competitor on a sustained basis and timely delivery. Ironically, some of the credit for this change goes to Detroit and its stiffer purchasing standards. Most, however, reflects the new willingness of American companies to learn the requirements of Japanese customers and make the necessary adjustments in their product, manufacturing process or way of doing business.

While applauding the expansion in local sourcing, both U.S. government and industry officials are worried about a parallel development: Japanese parts manufacturers coming to this country either to supply their traditional customers or Detroit. Concern about this trend is not new, but the attention given it has increased in line with each new report that another Japanese supplier was locating here. In fact, a recent survey by the Japan Economic Institute identified 76 Japanese-affiliated motor vehicle parts and accessories plants in operation or under construction at the end of 1986 (see Table 5) compared with 31 two years earlier. (Plants were only listed if their output is sold exclusively to original equipment automotive manufacturers or after-market distributors.)

People in the domestic industry maintain that the upsurge in Japanese investment in U.S. parts plants could represent the biggest challenge yet to the competitive position of American suppliers. The industry already has excess capacity, they argue, and the arrival of new Japanese producers will

only make a bad situation worse. But their criticism is not reserved for the competition. Japanese original equipment manufacturers also get a large part of the blame for encouraging their traditional suppliers, however indirectly, to follow them to the United States.

Faced with this rising backlash, parts suppliers in Japan have started to go on the offensive. Their industry is in a bind of its own, spokesmen say, as vehicle manufacturers build up offshore capacity and the strong yen makes exporting more difficult. Representatives add that even with incentives from state or local governments and some assurance of business from the transplants or Detroit, investing in the United States is not a risk-free move for Japan's predominantly small parts companies. If nothing else, the pressure on Japanese vehicle assembly plants here for greater sourcing from American suppliers could cost Japanese parts producers with U.S. facilities future contracts.

Even with more domestic suppliers tying up with Japanese companies to manufacture parts in this country, the debate over the competitive impact of Japanese-affiliated plants will not end anytime soon. One key to its staying power is the fact that Japanese parts producers continue to move into the market. Firm plans have already been announced for eight additional plants, while a long list of other companies is known to be looking for production sites.

One unfortunate side effect of this dispute is that it has overshadowed perhaps the single most promising piece of news for the beleaguered U.S. industry: the rising numbers of American companies serving as suppliers to Japanese vehicle assembly plants in the United States are in a good position to sell parts to original equipment manufacturers in Japan and to break into the dealer-controlled aftermarket for Japanese cars and trucks. This, after all, has always been the long-term objective.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.

Table 1: U.S. Trade in Motor Vehicle Parts and Accessories, 1980-86

(in thousands of dollars; exports f.a.s. value, imports Customs value basis)

	1980	1981	1982	1983	1984	1985	Ten Months 1985	Ten Months 1986
Overall Trade Balance								
Total Exports	\$9,307,157	\$11,261,660	\$10,641,745	\$11,045,088	\$13,836,159	\$14,270,471	\$12,147,175	\$10,798,839
Total Imports	9,025,010	8,447,409	9,112,226	12,597,206	16,980,573	18,947,124	15,652,762	17,515,441
Trade Balance	282,147	2,814,251	1,529,519	-1,552,118	-3,144,414	-4,676,653	-3,505,587	-6,716,602
U.S.-Japan Trade Balance								
Exports to Japan	105,209	118,991	127,847	148,368	179,205	203,634	168,221	185,548
Imports from Japan	2,828,725	1,821,699	1,822,344	2,112,954	2,939,927	3,470,429	2,850,465	3,708,455
Trade Balance	-2,723,516	-1,702,708	-1,694,497	-1,964,586	-2,760,722	-3,266,795	-2,682,244	-3,522,907
Major Export Markets								
Canada	5,119,372	6,194,440	6,382,881	7,722,027	9,680,280	9,766,120	8,363,303	7,075,354
Mexico	1,377,352	1,904,878	1,115,443	764,725	1,365,460	1,865,125	1,560,902	1,453,200
Venezuela	392,010	536,269	524,329	278,384	410,784	336,248	290,311	288,279
West Germany	156,795	221,238	226,741	219,880	244,103	282,010	237,624	226,931
United Kingdom	190,198	210,359	196,209	200,293	228,182	216,385	185,078	190,075
Japan	105,209	118,991	127,847	148,368	179,205	203,634	168,221	185,548
Australia	209,274	237,944	223,673	153,499	226,008	232,243	189,884	141,084
Saudi Arabia	158,770	223,230	266,011	225,365	208,169	157,932	136,228	105,849
Belgium	140,547	115,108	135,357	124,750	94,246	97,078	81,753	92,715
Brazil	n.a.	49,864	51,327	57,454	60,186	94,117	77,743	85,051
Major Import Suppliers								
Canada	3,379,057	3,896,053	4,524,980	6,568,970	8,728,217	9,347,295	7,875,973	7,781,461
Japan	2,828,725	1,821,699	1,822,344	2,112,954	2,939,927	3,470,429	2,850,465	3,708,455
Mexico	310,339	418,957	648,003	1,207,665	1,552,027	2,058,760	1,629,353	1,886,791
West Germany	797,327	586,035	506,679	631,396	849,243	995,238	784,367	1,168,707
Brazil	222,706	247,426	310,457	424,085	582,848	689,448	556,370	618,127
France	453,734	390,211	294,501	323,594	453,036	481,308	396,244	494,116
United Kingdom	299,852	260,871	189,526	232,457	359,765	383,162	308,825	392,517
Taiwan	110,084	118,120	133,820	248,446	329,339	316,767	265,715	323,109
Korea	120,313	163,625	189,234	254,088	347,103	352,036	298,808	283,270
Italy	140,098	147,523	123,524	130,708	182,088	205,835	165,025	228,559

Source: U.S. International Trade Commission, unpublished data

Table 2: U.S. Exports of Motor Vehicle Parts and Accessories to Japan, 1980-86

(in thousands of dollars, f.a.s. value basis)

	1980	1981	1982	1983	1984	1985	Ten Months 1986
Total	\$105,209	\$116,991	\$127,847	\$148,368	\$179,205	\$203,634	\$185,548
Bodies	0	350	260	266	111	245	351
Chassis	1,074	106	106	84	66	192	208
Axles	n.a.	438	1,025	9,696	1,558	451	560
Body Stampings	284	107	124	93	246	121	53
Bumpers	83	162	0	0	0	0	0
Wheels	962	620	1,196	1,107	1,049	725	954
Hubcaps and Wheel Covers	71	227	0	0	0	0	0
Radiators	77	366	319	277	71	0	0
Mufflers and Tailpipes	108	0	0	0	226	280	0
Brakes and Parts	4,545	4,275	3,832	4,487	6,022	4,767	5,752
Shock Absorbers	617	678	510	793	1,124	639	272
Transmissions	17,955	17,301	16,316	18,775	23,496	25,609	17,583
Parts Not Listed Above	33,678	32,179	31,678	33,585	67,992	97,227	93,455
Engines	469	1,354	1,191	1,350	3,263	4,573	3,027
Engine Parts	18,704	26,873	32,479	38,036	30,037	27,473	16,904
Ignition Wiring Sets*	554	698	696	640	676	867	820
Starter Motors	105	189	487	505	370	360	229
Spark Plugs	1,145	760	920	618	569	271	665
Points	0	0	0	0	0	0	0
Battery Chargers	141	214	245	117	385	79	59
Lead-Acid Storage Batteries*	1,067	1,488	1,513	2,007	2,178	2,095	2,460
Voltage Regulators*	93	137	112	82	146	144	163
Other Starting and Ignition Equipment	906	587	900	631	701	585	665
Lighting Equipment	350	395	507	272	286	169	460
Sealed Beams	2,326	2,592	4,186	4,314	4,177	2,802	2,248
Signaling Equipment	417	0	0	0	0	0	119
Pumps	857	552	243	156	260	82	132
Fans and Blowers	0	73	0	70	0	0	0
Air Conditioners	3,126	2,965	1,040	1,114	589	899	753
Air Conditioner Compressors	n.a.	n.a.	91	115	78	97	86
Springs and Leaves	0	0	0	0	0	0	0
Hinges and Other Hardware	610	529	575	658	774	740	1,385
Locks	0	0	0	0	0	113	153
Furniture*	603	2,179	2,729	1,196	1,897	999	1,041
Tempered Glass	350	138	120	81	95	0	76
Laminated Glass	1,091	3,096	3,530	5,226	7,569	5,469	6,564
Mirror Glass	0	0	0	0	0	0	0
Radioes	839	0	139	123	455	461	1,002
Tires	6,147	11,039	12,295	11,034	8,780	9,020	14,883

*Not all necessarily for motor vehicles.

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Exports: Schedule E Commodity by Country (PT 410)

Table 3: U.S. Imports of Motor Vehicle Parts and Accessories from Japan, 1980-86

(in thousands of dollars, Customs value basis)

	1980	1981	1982	1983	1984	1985	Ten Months 1986
Total	\$2,828,725	\$1,821,699	\$1,822,344	\$2,112,954	\$2,939,927	\$3,470,429	\$3,708,455
Compact Truck Bodies (incl. cabs)	206,923	31,339	20,291	9,296	12,451	58,966	75,649
Other Bodies	2,989	0	674	302	24,643	81,617	29,390
Compact Truck Chassis	1,237,310	0	0	0	1,042	1,119	2,635
Other Chassis	7,248	0	1,235	4,001	8,644	20,091	43,347
Body Stampings	55,178	67,544	69,235	69,689	92,804	117,699	114,689
Bumpers	14,678	16,307	18,127	18,885	30,375	40,606	45,152
Axle Spindles	0	0	5,771	703	22,259	33,328	47,646
Wheels	5,710	7,614	7,935	15,204	27,157	60,057	77,337
Hubs and Wheel Covers	1,075	1,993	980	1,873	3,466	4,453	4,167
Radiators	2,992	3,770	4,754	4,446	9,618	14,244	17,561
Mufflers and Tailpipes	10,669	10,561	9,569	17,322	16,766	21,935	30,139
Brakes and Parts	18,882	25,263	25,332	31,466	43,289	57,024	65,414
Shock Absorbers	6,844	11,152	12,199	15,538	21,924	24,283	20,252
Transmissions	36,405	44,513	81,671	122,957	124,762	159,069	226,999
Parts Not Listed Above	197,217	268,536	274,069	356,917	612,178	748,942	800,156
Diesel Engines	9,511	31,945	22,845	12,448	19,180	9,615	8,668
Gasoline Engines	87,788	106,598	116,795	66,460	128,125	121,532	113,787
Engine Parts	118,455	142,331	107,331	117,559	152,621	179,273	178,444
Ignition Wiring Sets*	2,890	3,312	4,331	6,486	11,291	11,803	20,480
Starter Motors	16,459	23,571	19,486	25,958	36,591	43,563	43,262
Spark Plugs	16,216	13,674	15,638	18,164	24,281	29,428	24,250
Points	4,625	3,637	2,392	2,449	2,644	2,024	1,697
Battery Chargers	7,158	8,424	8,486	10,468	17,071	22,998	23,770
Lead-Acid Storage Batteries*	12,736	11,372	12,786	14,751	19,510	29,049	27,037
Voltage Regulators*	3,216	4,218	4,588	4,693	7,757	4,038	6,091
Other Starting and Ignition Equipment*	26,313	27,081	25,440	31,100	49,403	61,003	95,470
Speedometers and Tachometers*	11,303	13,733	11,069	14,934	23,955	23,647	24,228
Lighting Equipment	25,796	26,136	28,646	34,176	42,829	53,226	58,013
Sealed Beams	2,030	1,412	1,075	904	878	1,174	1,416
Pumps	15,156	20,754	16,610	22,608	35,273	44,834	53,062
Fans and Blowers	3,992	4,746	10,735	4,491	5,947	7,996	12,371
Air Conditioners and Parts	n.a.	n.a.	n.a.	51,207	71,704	142,107	138,634
Air Conditioner Compressors	n.a.	n.a.	39,464	70,610	103,233	130,284	141,456
Springs and Leaves	4,699	6,435	4,707	9,292	16,630	15,987	14,205
Hinges	6,899	8,238	9,464	14,315	25,368	28,492	26,919
Locks	2,627	2,860	3,237	3,318	5,462	5,341	7,063
Furniture	6,384	7,794	9,743	11,189	18,101	38,271	56,054
Tempered Glass*	6,936	7,117	8,070	8,271	13,307	16,049	16,049
Laminated Glass	2,479	2,584	2,788	3,544	6,066	6,166	13,765
Radio	45,483	36,442	34,387	27,769	27,632	38,222	29,854
Radio-CB Combinations	1,911	300	173	268	105	195	326
Tape Players	27,691	50,977	48,415	61,934	50,337	46,022	53,890
Radio-Tape Player Combinations	288,476	384,959	341,324	356,472	431,351	524,973	468,271
Tires	214,345	302,805	309,985	343,026	425,952	466,947	394,833

*Not all necessarily for motor vehicles.

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Imports for Consumption and General Imports (FT 246)

Table 4: Japanese Investment in U.S. Automotive Assembly Facilities

Parent	Share	Subsidiary	Location	Product Line	Start Date	Annual Capacity	Employment	Investment (millions)	Comments
Honda Motor Co., Ltd.	100%	Honda of America Manufacturing, Inc.	Marysville, OH	Compact cars Subcompact cars	November 1982 July 1986	320,000 360,000 (1988)	3,700	\$615	Stamping plant makes all exterior body panels and major interior structural panels for Accord and Civic. Plastics plant makes Accord bumpers and dashboards. Some Civic engines assembled at Anna, Ohio plant (see Table 5). Current output mix: three Accords to two Civics.
Nissan Motor Co., Ltd.	100%	Nissan Motor Manufacturing Corp. U.S.A.	Sayrna, TN	Compact pickups Subcompact cars	June 1983 March 1985	240,000	3,300	\$848	All sheet metal parts for trucks and cars stamped at plant except truck frames. Current output mix: two Sentras for every pickup.
Toyota Motor Corp. General Motors Corp.	50% 50%	New United Motor Manufacturing Inc.	Fremont, CA	Subcompact cars	December 1984	250,000	2,600	\$450	Stamping plant makes all sheet metal parts for Chevrolet Nova. Started assembling Corolla FX 16 for sale by Toyota Motor Sales U.S.A. Inc. in September 1986. FX currently being produced at annual rate of 35,000 units.
Mazda Motor Corp.	100%	Mazda Motor Manufacturing (USA) Corp.	Flat Rock, MI	Compact cars	September 1987	240,000 (fall 1988)	3,500 (fall 1988)	\$550*	All exterior sheet metal parts will be stamped at the plant. Some plastic components will also be made. Two cars will be turned out: a 626-class model for Mazda and a sporty two-door model built on the same platform for Ford Motor Co. The Mazda model will account for 40 to 50 percent of output.
Mitsubishi Motors Corp. Chrysler Corp.	50% 50%	Diamond-Star Motors Corp.	Bloomington-Normal, IL	Subcompact cars	November 1988	240,000 (1990)	2,900 (1990)	\$700*	Stamping plant will make all exterior body panels for MNC-designed "sports specialty" car. Some plastic parts will also be molded in-house. Output will be split equally between the partners.
Toyota Motor Corp.	100%	Toyota Motor Manufacturing, U.S.A. Inc.	Georgetown, KY	Compact cars	1988	200,000 (1989)	3,000 (1989)	\$800*	All exterior body components for 2,000cc Camry-class car will be stamped at plant. A plastics plant will make bumpers and interior components.
Fuji Heavy Industries, Ltd. Isuzu Motors Ltd.	51% 49%	Subaru-Isuzu Automotive Inc.	Lafayette, IN	Subcompact cars Compact pickups	November 1989	120,000 (1990)	1,700 (1990)	\$500*	Will have stamping plant. Output will be split equally between the two companies. FHI will make sedans and station wagons for sale by Subaru of America Inc.; Isuzu will produce P'UP pickups.

*Projected

Table 5: U.S. Production of Motor Vehicle Parts and Accessories by Japanese-Affiliated Companies

Company	Parent	Share	Plant Location	Year Operational	Product Line	Comments
*AMBRAKE Corp.	Akebono Brake Industry Co., Ltd. General Motors Corp.	50% 50	Elizabethtown, KY	1988	Disc and drum brake assemblies and components	Will be selling in both OE and aftermarket.
AMTEX Inc.	Hayashi Teikoku Co., Ltd. C.H. Masland & Sons	50 50	Manteca, CA	1986	Floor and trunk mats; door trim and other interior trim products	Primarily OE supplier to New United Motor Mfg. Inc. but also sells in aftermarket.
AP Technoglass Corp.	Asahi Glass Co., Ltd. PPG Industries, Inc.	80 20	Bellefontaine, OH	1986	Safety glass	Output goes to Belletech Corp. (see below).
ASTRONET Corp.	Mitsubishi Electric Corp. Mitsubishi Corp. Plessey Co., Plc	25 24 51	Lake Mary, FL	1984	Cellular mobile communications equipment	Aftermarket supplier.
ATR Wire and Cable Co.	Tokyo Rope Manufacturing Co., Ltd. Mitsubishi Corp. C. Itoh & Co., Ltd.	60 20 20	Danville, KY	1981	Steel cord and bead wire for tires	Output goes to American tire manufacturers.
*Aisin U.S.A. Inc.	Aisin Seiki Co., Ltd.	100	Seymour, IN	1988	Mechanical and other components	Will be OE supplier to both the U.S. production units of Japanese companies and American producers.
Alpine Electronics Manufacturing of America Inc.	Alps Electric Co., Ltd.	100	Greenwood, IN	1987	AM/FM radio-cassette combinations; switches	OE supplier to BMW of North America Inc. and Honda of America Mfg., Inc. Replaces a smaller California plant that went into operation in 1984.
*Aamo Manufacturing Inc.	Aamo Co., Ltd.	100	Battle Creek, MI	1987	Plastic parts for windshield washers	Output will go to Nippondenso Manufacturing U.S.A., Inc. (see below).
Bellemar Parts Industries Inc.	Honda Motor Co., Ltd. Sankai Giken Kogyo Co., Ltd. Tokyo Seat Co., Ltd.	80 10 10	Marysville, OH	1982	Seat assemblies and steel wheels	OE supplier to Honda of America Mfg., Inc.
Bellemar Parts Industries Inc.	Honda Motor Co., Ltd. Sankai Giken Kogyo Co., Ltd. Tokyo Seat Co., Ltd.	80 10 10	Russells Point, OH	1985	Exhaust systems, catalytic converters, brake lines, door sashes and seat frames	OE supplier to Honda of America Mfg., Inc.
Belletech Corp.	Asahi Glass Co., Ltd. Takahashi Glass Industry Co., Ltd. PPG Industries, Inc.	60 20 20	Bellefontaine, OH	1986	Glass fittings	Assembles windows and windshields from glass supplied by AP Technoglass Corp. Output goes to Honda of America Mfg., Inc.
*Bloomington Seating Co.	Namba Press Works Co., Ltd. Douglas & Lomason Co.	50 50	Normal, IL	1988	Seats	Will be OE supplier to Diamond-Star Motors Corp.

<u>Company</u>	<u>Parent</u>	<u>Share</u>	<u>Plant Location</u>	<u>Year Operational</u>	<u>Product Line</u>	<u>Comments</u>
Bridgestone (USA) Inc.	Bridgestone Corp.	100	LaVergne, TN	1982	Radial tires for heavy-duty trucks and buses	Sells primarily in replacement market but some tires go into OE market. Makes tires for sale under own name as well as for Firestone Tire & Rubber Co. Production of car tires under consideration.
CKR Industries, Inc.	Kingawa Rubber Industrial Co., Ltd. Chardon Rubber Co.	45 55	Winchester, TN	1986	Rubber and plastic weather stripping	OE supplier to Nissan Motor Mfg. Corp. U.S.A.
Calsonic, Inc.	Mihon Radiator Co., Ltd.	100	Irvine, CA	1976	Air conditioning systems	OE supplier to Nissan Motor Corp. U.S.A. Units are sent to seven Nissan port facilities around the country where they are installed in imported vehicles or to 12 parts depots from which Nissan dealers get supplies.
Calsonic Manufacturing Corp.	Mihon Radiator Co., Ltd.	100	Shelbyville, TN	1983	Air conditioning systems, exhaust assemblies and engine cooling systems	OE supplier to Nissan Motor Mfg. Corp. U.S.A.
Cast Forge Co.	Nippon Light Metal Co., Ltd. Kelsey-Hayes Co.	20 80	Howell, MI	1982	Aluminum wheels, transmission component parts and engine parts	Output goes to OE makers.
*Central Manufacturing Co.	Central Motor Wheel Co., Ltd. Toyoda Tsusho Kaisha Ltd. Kelsey-Hayes Co.	40 20 40	Paris, KY	1988	Steel and aluminum wheels	Will be OE supplier to both the U.S. production units of Japanese companies and American makers.
Clarion Manufacturing Corp. of America	Clarion Co., Ltd.	100	Walton, KY	1987	AM/FM radio-cassette combinations and AM/FM radio receivers	OE supplier to Nissan Motor Mfg. Corp. U.S.A. Also supplies Subaru of America Inc. dealers.
Curtis-Maruyasu America, Inc.	Maruyasu Industries Co., Ltd. Curtis Products, Inc.	50 50	Tracy, CA	1985	Fuel line and hydraulic brake assemblies	OE supplier to New United Motor Mfg. Inc.
Dunlop Tire Corp.	Sumitomo Rubber Industries, Ltd.	98	Huntville, AL Buffalo, NY	1986	Radial and belted tires for cars and radial and bias tires for light- and medium-duty trucks	OE supplier to Honda of America Mfg., Inc., General Motors Corp.'s truck and bus division and other U.S. truck and trailer manufacturers. Dunlop brand car and truck replacement tires marketed through national base of independent dealers and distributors.
Dunlop Tire Corp.	Sumitomo Rubber Industries, Ltd.	98	Utica, NY	1986	Tire cord	Output goes to two Dunlop tire manufacturing plants.

<u>Company</u>	<u>Parent</u>	<u>Share</u>	<u>Plant Location</u>	<u>Year Operational</u>	<u>Product Line</u>	<u>Comments</u>
*Enkenel America Inc.	Enshu Keigokin Co., Ltd. Mitsubishi Corp.	60 40	Columbus, IN	1987	Aluminum wheels	Will primarily be OE supplier to American companies but expects some sales in aftermarket.
Fuji Koki America Inc.	Fuji Koki Manufacturing Co., Ltd.	100	Dallas, TX	1982	Expansion valves for air conditioning systems	OE supplier to U.S. manufacturing affiliates of Japanese companies as well as American producers.
Fujitsu America, Inc.	Fujitsu, Ltd.	100	Richardson, TX	1984	Cellular mobile communications equipment	Aftermarket supplier.
*Fujitsu Ten America Inc.	Fujitsu Ten Ltd.	100	Rushville, IN	1987	AM/FM radio-cassette combinations, AM/FM radio receivers and cassette decks	Will be OE supplier to both the American production units of Japanese companies and U.S. makers. Will also supply aftermarket.
*Greenville Technology Inc.	Morioku Co., Ltd.	100	Greenville, OH	1987	Plastic parts	Will be OE supplier to Honda of America Mfg., Inc.
Hi-Lex Corp.	Nippon Cable System, Inc.	100	Battle Creek, MI	1978	Control cables for accelerators, clutches, hood and trunk release mechanisms, gas filler lids and brakes	Has OE contracts with General Motors Corp., Ford Motor Co., Chrysler Corp. and Nissan Motor Mfg. Corp. U.S.A. Some output also goes to replacement market.
*Hisan Inc.	Sanoh Industrial Co., Ltd. ITT Higbie Manufacturing Co.	50 50	Archbold, OH	1987	Fuel and brake lines	Will be OE supplier to the U.S. manufacturing affiliates of Japanese companies.
Hitachi Automotive Products (USA) Inc.	Hitachi, Ltd.	100	Hartrodsburg, KY	1986	Electronic engine control units, ignition coils, pressure sensors, idle speed control valves, starters and alternators	OE supplier to both the U.S. production subsidiaries of Japanese companies and American producers.
Honda of America Manufacturing, Inc.	Honda Motor Co., Ltd.	100	Anna, OH	1986	Engines and aluminum wheels	Currently assembles Civic engines at an annual rate of about 60,000 units. In early January 1987 Honda announced that it would invest \$450 million in the plant for the production of engine, drive train, suspension and brake assemblies for the Accord and Civic. When full-scale production is reached in 1990, the plant will be able to make 360,000 engines a year.

<u>Company</u>	<u>Parent</u>	<u>Share</u>	<u>Plant Location</u>	<u>Year Operational</u>	<u>Product Line</u>	<u>Comments</u>
Izumi Corp.	Izumi Motor Co., Ltd.	100	Yaphank, NY	1979	Steering wheels and horn pad assemblies	OE supplier to Chrysler Corp., Ford Motor Co., General Motors Corp. and most foreign companies with U.S. production facilities. Opened urethane manufacturing plant in 1986.
Jideco of Bardstown, Inc.	Jidosha Denki Kogyo Co., Ltd.	100	Bardstown, KY	1987	Windshield wiper motors and automatic speed control devices	Has OE contract with Nissan Motor Mfg. Corp. U.S.A.
KTH Parts Industries Inc.	Kikuchi Press Kogyo Co., Ltd. Takao Kinzoku Kogyo Co., Ltd. Hirata Press Kogyo Co., Ltd. Hongo Seisakusho Co., Ltd.	n.a. n.a. n.a. n.a.	St. Paris, OH	1985	Stamped and welded internal structural components	OE supplier to Honda of America Mfg., Inc.
Kantus Corp.	Kanto Seiki Co., Ltd.	100	Lewisburg, TN	1985	Plastic instrument panels, radiator grilles, console and glove boxes, bumpers and splash guards	OE supplier to Nissan Motor Mfg. Corp. U.S.A. Will add urethane foam operation in summer of 1987 to make foam pads for instrument panels.
Kux Manufacturing Co.	Mitsubishi Corp.	100	Detroit, MI	1985	Self-adhesive lettering and decals	Output goes mainly to General Motors Corp.
Matsushita Communication Corp. of America	Matsushita Communication Industrial Co., Ltd. Matsushita Electric Industrial Co., Ltd.	50 50	Franklin Park, IL	1984	Cellular mobile communications equipment	Aftermarket supplier.
*Matsushita Communication Corp. of America	Matsushita Communication Industrial Co., Ltd. Matsushita Electric Industrial Co., Ltd.	50 50	Peachtree City, GA	1987	AM/FM radio-cassette combinations and AM/FM radio receivers	Will supply OE market.
Mitsubishi Consumer Electronics America, Inc.	Mitsubishi Electric Corp.	100	Braselton, GA	1986	Cellular mobile communications equipment	Aftermarket supplier.
Musashi USA Inc.	Musashi Precision Industry Co., Ltd.	100	Battle Creek, MI	1985	Arm bushing and joint assemblies	OE supplier to Ford Motor Co.
NEC America, Inc.	NEC Corp.	100	Hillaboro, OR	1985	Cellular mobile communications equipment	Aftermarket supplier.
NGK Spark Plugs (U.S.A.), Inc.	NGK Spark Plug Co., Ltd.	100	Irvine, CA	1977	Spark plugs	Output goes into replacement market for both imported and domestically made vehicles.
*NHK-Associated Spring Suspension Components Inc.	NHK Spring Co., Ltd. Barnes Group Inc.	55 45	Bowling Green, KY	1987	Coil suspension springs	Expects initially to be OE supplier to Japanese auto makers with U.S. facilities.
NOK Inc.	NOK Corp.	100	LaGrange, GA	1980	Oil and mechanical seals	Has OE contracts with General Motors Corp., Ford Motor Co., Chrysler Corp., American Motors Corp. and Navistar International Corp. Also supplies aftermarket.

Comments

<u>Company</u>	<u>Parent</u>	<u>Share</u>	<u>Plant Location</u>	<u>Year Operational</u>	<u>Product Line</u>	<u>Comments</u>
Neaton Auto Products Manufacturing Inc.	Nihon Plast Co., Ltd.	100	Eaton, OH	1985	Steering wheels and other plastic interior decorative parts	OE supplier of steering wheels to Honda of America Mfg., Inc. and Nissan Motor Mfg. Corp. U.S.A. Decorative parts go to Honda.
*New Sabina Industries Inc.	Nippon Seiki Co., Ltd.	100	Sabina, OH	1987	Instrument clusters (speedometer, tachometer, fuel gauge and temperature gauge)	Will primarily be OE supplier to Honda of America Mfg., Inc.
Nippondenso of Los Angeles Inc.	Nippondenso Co., Ltd.	100	Long Beach, CA	1971	Air conditioning systems	Has OE contract with New United Motor Mfg. Inc. Also supplies units to the dealer networks of Toyota Motor Corp. and other Japanese motor vehicle makers. Re-manufactures starters, alternators and electronic parts.
Nippondenso Manufacturing U.S.A., Inc.	Nippondenso Co., Ltd.	100	Battle Creek, MI	1986	Heat exchangers, evaporators and condensers for air conditioners, windshield washers, heaters and radiators	Air conditioner parts shipped to Nippondenso of Los Angeles Inc. (see above) for assembly. Other products go to Honda of America Mfg., Inc. Another Nippondenso Co., Ltd. unit heaters in Battle Creek from 1983 until this plant came onstream.
*Nishikawa Standard Co.	Nishikawa Rubber Co., Ltd. Standard Products Co.	60 40	Topeka, IN	1987	Rubber weather stripping	Expects to be primarily OE supplier to the U.S. production units of Japanese makers.
North American Lighting Inc.	Koito Manufacturing Co., Ltd. Ichikoh Industries Ltd. Hella K.G. Hueck & Co.	39 10 51	Flora, IL	1983	Front and park lamps, rear combination lamp assemblies, fog lamps, license-plate lamps, high-mounted stop lamps and aerodynamic lamps	OE supplier to Nissan Motor Mfg. Corp. U.S.A., BMW of North America Inc., Volkswagen of America, Inc., Ford Motor Co., General Motors Corp. and Chrysler Corp.
*Ogihara America Corp.	Ogihara Iron Works Co., Ltd.	100	Howell, MI	1987	Body stampings	Will be OE supplier to Ford Motor Co.
Oki America Inc.	Oki Electric Industry Co., Ltd.	100	Mortcross, GA	1984	Cellular mobile communications equipment	Aftermarket supplier.
PEP Industries Inc.	Fujikura Ltd. Aluminum Co. of America	49 51	Houston, MS Ripley, MS Nashville, TN	1986	Wire harnesses	Primarily OE supplier to Ford Motor Co.
*Penstone Inc.	Iehizaki Honten Co., Ltd. Nippon Sheet Glass Co., Ltd.	70 30	Rockwood, MI	1987	Safety glass	Will be OE supplier to Mazda Motor Mfg. (USA) Corp.

Company	Parent	Share	Plant Location	Year Operational	Product Line	Comments
Pioneer Industrial Components Inc.	Pioneer Electronic Corp.	100	Springboro, OH	1986	AM/FM radio-cassette combinations	Primarily OE supplier to both the U.S. manufacturing affiliates of Japanese companies and American producers, although does supply some units to the aftermarket.
Sanden International (USA), Inc.	Sanden Corp.	100	Dallas, TX	1980	Compressors, compressor clutches and evaporators for air conditioning systems	Sells in both OE market and aftermarket to American manufacturers and the U.S. production affiliates of Japanese companies.
Service Spring Co.	Toyohima Special Steel Co., Ltd.	100	Indianapolis, IN	1986	Leaf springs	Sells mainly in the aftermarket but does do some OE business.
Sheller-Ryobi Corp.	Ryobi Ltd. Sheller-Globe Corp.	55 45	Shelbyville, IN	1986	Aluminum transmission cases	OE supplier to General Motors Corp. and Ford Motor Co.
*Shova Aluminum Corp. of America	Shova Aluminum Corp.	100	Mc. Sterling, OH	1987	Heat exchangers, evaporators and condensers for air conditioning systems	Will be OE supplier.
*I.I. Stanley Co., Inc.	Stanley Electric Co., Ltd. Kyokuto Boeki Kaisha Ltd.	70 30	Battle Creek, MI	1987	Electrical components	Expects to be OE supplier to both the U.S. manufacturing affiliates of Japanese companies and American makers.
Stanley Electric U.S. Co., Inc.	Stanley Electric Co., Ltd.	100	London, OH	1982	Front combination lamp assemblies, head lamps, front turn signal lamps, tail lamps and license plate lamps	OE supplier to Honda of America Mfg., Inc.
*Sumitomo Electric Wiring Systems Inc.	Sumitomo Electric Industries, Ltd. Sumitomo Wiring Systems, Ltd.	60 40	Morgantown, KY	1987	Wire harnesses	Will initially be OE supplier to the American production units of Japanese companies.
TG (U.S.A.) Corp.	Toyoda Gosei Co., Ltd. Mitsui & Co., Ltd.	80 20	Perryville, MO	1987	Steering wheels and governor gears	Has OE contracts with two of the U.S. Big Three companies. Also expects to supply the American production units of Japanese companies. With the completion of phase two by late summer 1987, the company will be producing a variety of plastic interior and exterior parts.
*Tokai Corp.	Tokai Rubber Industries, Ltd.	100	Livonia, MI	1987	Anti-vibration rubber engine mounts	Will be OE supplier to Ford Motor Co.
*Tosmeco Mulciler Inc.	Masuda Manufacturing Co., Ltd.	100	Columbus, OH	1987	Stamped parts	Will be OE supplier to Honda of America Mfg., Inc.
Topy Corp.	Topy Industries, Ltd.	100	Frankfort, KY	1986	Steel wheels	OE supplier to Nissan Motor Mfg. Corp. U.S.A. and Honda of America Mfg., Inc.

Company	Parent	Share	Plant Location	Year Operational	Product Line	Comments
Toyota Auto Body Inc. of California	Toyota Motor Corp.	100	Long Beach, CA	1974	Cargo beds for pickup trucks	OE supplier to Toyota Motor Sales U.S.A. Inc. Beds shipped to eight Toyota port facilities around the United States where they are mounted on imported cab-chassis units.
Tri-Con Industries, Ltd.	Tokyo Seat Co., Ltd.	100	Columbia, MO	1983	Seats	Has OE contract with Chrysler Corp. Also has car seat sewing plant in Cape Girardeau, Missouri.
Tri-Con Industries, Ltd.	Tokyo Seat Co., Ltd.	100	Lincoln, NE	1985	Seat frames	Output goes to Tri-Con seat plant.
*United Globe Nippon, Inc.	Nihon Tokushu Torio Co., Ltd. Hirotoni Co., Ltd. Fujiiyoshi & Co., Ltd. Globe Industries, Inc.	50 50 50	Chicago Heights, IL	1987	Sound control products; package shelf, trunk and other trim products; and rustproof and anti-chip coatings	Will be OE supplier to the U.S. production plants of Japanese companies.
*United L-N Glass, Inc.	Nippon Sheet Glass Co., Ltd. Libbey-Owens-Ford Co.	50 50	Versailles, KY	1987	Safety glass	Will be OE supplier to Toyota Motor Mfg., U.S.A. Inc.
VDO-YAZAKI Corp.	Yazaki Corp. VDO Adolf Schindling AG	50 50	Winchester, VA	1986	Speedometers, tachometers, fuel gauges, temperature gauges and instrument clusters	Mainly OE supplier to American makers.
Viam Manufacturing Inc.	Japan Vileme Co., Ltd. Dainippon Ink & Chemicals Inc.	60 40	Santa Fe Springs, CA	1984	Floor mats	Currently sells in just OE market but expects to begin selling in the aftermarket.
Warner-Ishi Corp.	Ishikawajima-Harima Heavy Industries Co., Ltd. Borg-Warner Corp.	50 50	Shelbyville, IL	1985	Turbochargers	OE and aftermarket supplier.
Wynn-Kiki Inc.	Diesel Kiki Co., Ltd. Wynn Industries, Inc.	50 50	Fort Worth, TX	1984	Condensers, evaporators and tube assemblies for air conditioning systems	Sells primarily in OE market to both American manufacturers and U.S. manufacturing affiliates of Japanese companies. Some sales of replacement parts.
*Woodbridge INOAC Inc.	Inoue MTP Co., Ltd. Woodbridge Foam Corp.	49 51	Bardstown, KY	1988	Plastic instrument panels, body side moldings and other rubber, urethane and plastic products	Expects to be OE supplier to the American production units of Japanese companies and U.S. producers.

*Under construction.

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Air Conditioning Systems
 Calsonic, Inc.
 Calsonic Manufacturing Corp.
 Nippondenso of Los Angeles Inc.

Air Conditioning System Parts
 Fuji Koki America Inc.
 Nippondenso Manufacturing U.S.A., Inc.
 Sanden International (USA), Inc.
 Showa Aluminum Corp. of America
 Wynn Kiki Inc.

Brakes and Fuel Lines
 Bellemar Parts Industries Inc.
 Curtis-Maruyasu America, Inc.
 Hisan Inc.

Brakes
 AMBRAKE Corp.

Cables
 Hi-Lex Corp.

Cargo Beds
 Toyota Auto Body Inc. of California

Electronic Parts (Miscellaneous)
 Hitachi Automotive Products (USA) Inc.
 Jideco of Bardtown, Inc.
 I.I. Stanley Co., Inc.

Engine and Transmission Parts (Die-Cast)
 Cast Forge Co.
 Sheller-Kyobi Corp.

Engines
 Honda of America Manufacturing, Inc.

Exhaust Systems
 Bellemar Parts Industries Inc.
 Calsonic Manufacturing Corp.

Glass
 AP Technoglass Corp.
 Belletech Corp.
 Penstone Inc.
 United L-N Glass, Inc.

Heaters
 Nippondenso Manufacturing U.S.A., Inc.

Instrument Panels and Other Plastic Parts
 Greenville Technology Inc.
 Kantus Corp.
 Neaton Auto Products Manufacturing Inc.
 Woodbridge INOAC Inc.

Instruments
 New Sabina Industries Inc.
 VDO-YAZAKI Corp.

Lettering
 Kux Manufacturing Co.

Lighting Equipment
 North American Lighting, Inc.
 Stanley Electric U.S. Co., Inc.

Mats
 AMTEX Inc.
 Viam Manufacturing Inc.
Mechanical Components (Miscellaneous)
 Aisin U.S.A. Inc.

Motors
 Jideco of Bardtown, Inc.

Radiators
 Calsonic Manufacturing Corp.
 Nippondenso Manufacturing U.S.A., Inc.

Radios
 Alpine Electronics Manufacturing of America Inc.
 Clarion Manufacturing Corp. of America
 Fujitsu Ten America Inc.
 Matsushita Communication Corp. of America
 Pioneer Industrial Components Inc.

Rubber Products (Miscellaneous)
 Tokai Corp.

Seals
 NOK Inc.

Seats
 Bellemar Parts Industries Inc.
 Bloomington Seating Co.
 Tri-Con Industries, Ltd.

Sound Control Products
 United Globe Nippon, Inc.

Spark Plugs
 NGK Spark Plugs (U.S.A.), Inc.

Springs
 NHK-Associated Spring Suspension Components Inc.
 Service Spring Co.

Stampings
 KTH Parts Industries Inc.
 Ogihara America Corp.
 Tomasco Mulciber Inc.

Steering Wheels
 Izumi Corp.
 Neaton Auto Products Manufacturing Inc.
 TC (U.S.A.) Corp.

Suspension Parts
 Musashi U.S.A. Inc.

Telephones
 ASTRONET Corp.
 Fujitsu America, Inc.
 Matsushita Communication Corp. of America
 Mitsubishi Consumer Electronics America, Inc.
 NEC America, Inc.
 Oki America Inc.

Tires
 ATR Wire and Cable Co.
 Bridgestone (USA) Inc.
 Dunlop Tire Corp.

Turbochargers
 Warner-Ishi Corp.

Weather Stripping
 CCR Industries, Inc.
 Nishikawa Standard Co.

Wheels
 Bellemar Parts Industries Inc.
 Cast Forge Co.
 Central Manufacturing Co.
 Enkenel America Inc.
 Honda of America Manufacturing, Inc.
 Topy Corp.

Windshield Washers and Parts
 Amco Manufacturing Inc.
 Nippondenso Manufacturing U.S.A., Inc.

Wire Harnesses
 PEP Industries Inc.
 Sumitomo Electric Wiring Systems Inc.